

## REMARKS

### **I. Status of the Application.**

Claims 1 through 18 are pending in the application. In a final Office Action dated September 2, 2003 (the "Office Action"), the Examiner: (1) rejected Claims 1 through 6 under 35 U.S.C. § 102(b) as being anticipated by U.S. Patent No. 5,200,151 (the "Long reference"), or in the alternative under 35 U.S.C. § 103(a) as being obvious over the Long reference; (2) rejected Claims 7, 8, 13, 16, and 18 under 35 U.S.C. § 102(b) as being anticipated by U.S. Patent No. 4,084,730 (the "Franke reference"), or in the alternative under 35 U.S.C. § 103(a) as being obvious over the Franke reference; (3) rejected Claims 7-10 and 13-18 under 35 U.S.C. 103(a) as being obvious over U.S. Patent No. 4,824,641 (the "Williams reference"), in view of the Long reference; and (4) objected to Claims 11 and 12 as being dependent on a rejected base Claim. The Examiner noted that Claims 11 and 12 "would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims." Office Action Pg. 5.

In this response, the Applicant: (1) respectfully submits amendments to Claims 1, 7 and 16; (2) respectfully overcomes the rejections of Claims 1 through 6 made under 35 U.S.C. § 102(b) and 35 U.S.C. § 103(a); (3) respectfully overcomes the rejections of Claims 7, 8, 13, 16, and 18 made under 35 U.S.C. § 102(b) and 35 U.S.C. § 103(a); and (4) respectfully overcomes the rejections of Claims 7-10 and 13-18 under 35 U.S.C. § 103(a). Claims 1 through 18 remain in the application after the amendments. Applicant respectfully submits that ample support may be found in the Applicant's specification for the amendments to Claims 1, 7 and 16.

**II. Rejection of Claims 1-18 Under 35 U.S.C. § 102(b) and 35 U.S.C. § 103(a) Should Be Withdrawn.**

**A. The Rejection of Claims 1, 7 and 16 Under 35 U.S.C. § 102(b) Should Be Withdrawn.**

In rejecting the Applicant's claims 1, 7 and 16, the Examiner asserted that all of the elements contained therein were anticipated by either the Long reference or the Franke reference. "A claim is anticipated only if each and every element as set forth in the claim is found, either expressly or inherently described, in a single prior art reference." M.P.E.P. § 2131 (citing Verdegaal Bros. v. Union Oil of California, 814 F.2d 628, 631 (Fed. Cir. 1987)). Neither the Long reference nor the Franke reference individually disclose all the elements of Applicant's claims 1, 7 or 16. For example, neither reference discloses "a first cylindrical portion adjacent to the lead-in portion, the first cylindrical portion having a first exterior diameter; [and] a second cylindrical portion adjacent to the first cylindrical portion, the second cylindrical portion having a second exterior diameter that is greater than the first exterior diameter," as set forth in Applicant's amended claims 1 and 16. Furthermore, neither reference discloses "a pipette tip including a collar portion and an adjacent conical head, the conical head for receiving or expelling fluids from the tip, the collar portion including an interior cylindrical wall having a first interior diameter, the interior cylindrical wall void of any raised sealing rings," as set forth in Applicant's amended claim 7.

As set forth above, it is respectfully submitted that neither the Long reference nor the Franke reference individually disclose all the elements of the Applicant's invention. Accordingly, the Applicant respectfully submits that the Examiner has not established a proper basis for rejection of claims 1, 7 and 16 under 35 U.S.C. §102(b), as the cited references do not describe every claim limitation of those claims. Thus, the Applicant respectfully requests that the Examiner's rejection of claims 1, 7 and 16 made under 35 U.S.C. §102(b) be withdrawn.

**B. The Alternate Rejection of Claims 1, 7 and 16 Under 35 U.S.C. § 103(a) Should Be Withdrawn.**

**1. The Examiner Has Failed To Make a Prima Facie Case of Obviousness**

The Examiner has alternatively rejected claims 1, 7 and 16 under 35 U.S.C. § 103(a) as being obvious over either (i) the Long reference, (ii) the Franke reference, or (iii) the Williams reference in view of the Long reference. It is respectfully submitted that the Examiner has failed to make a *prima facie* case of obviousness for each of claims 1, 7 and 16. "To establish *prima facie* obviousness of a claimed invention, all the claim limitations must be taught or suggested by the prior art." M.P.E.P. § 2143.03 (citing *In re Royka*, 490 F.2d 981, 180 USPQ 580 (CCPA 1974)). In order to "prevent the use of hindsight based on the invention," the Examiner must show a motivation to combine the references that creates the case for obviousness. *In re Rouffet*, 149 F.3d 1350 (Fed. Cir 1998). The mere fact that references can be combined or modified does not render the resultant combination obvious unless the prior art also suggests the desirability of the combination. *In re Mills*, 916 F.2d 680 (Fed. Cir. 1990). Furthermore, identification in the

prior art of each individual part claimed is insufficient to defeat patentability of the whole claimed invention. See *In re Kotzab*, 217 F3d 1365 (Fed. Cir. 2000). Rather, to establish obviousness based on a combination of the elements disclosed in the prior art, there must be some motivation, suggestion or teaching of the desirability of making the specific combination that was made by the applicant. *Id.* at 1369. In addition, the Examiner can not provide mere conclusive statements regarding motivations to combine, but must explain the motivation to combine references with "reasonable specificity." See MPEP § 2142.

In the present case, the Examiner has not shown where the references expressly or impliedly suggest the claimed invention. With respect to the 103(a) rejections based on either Long or Franke, the examiner provides no rationale for amending the references to provide the claimed invention. Accordingly, the Examiner has failed to make a *prima facie* case of obviousness for these rejections.

With respect to the 103(a) rejection based on Williams in view of Long, the references are not properly combinable as suggested by the examiner, because the intended function of the references would be destroyed. See MPEP 2143.01 In particular, the protuberance 166 shown on the holder stem 72 in Figs. 3 and 5 of Long is not a sealing band as argued by the examiner. Instead, this protuberance 166 engages tip ridges 160 on the pipette tip 70 to provide a "snap-action" when the ridges are slid over the protuberance (see col. 7, lines 59-69 and col. 8, lines 1-7 of Long). As clearly seen from Figs. 3-5, no sealing action is provided by protuberance 166. The Long reference only shows the use of raised seals 184 on the tip to provide sealing between the tip and the mandrel. This is also what is shown in the Williams reference. Therefore,

combining the Long and Williams references as suggested by the examiner would render the prior art unsatisfactory for its intended purpose and/or change the principle of operation the references. Accordingly, the Examiner has failed to make a *prima facie* case of obviousness with respect to claim 7.

As set forth above, the Examiner has failed to make a *prima facie* case of obviousness with respect to claims 1, 7 and 16 and the Examiner's rejection of claims 1, 7 and 16 under 35 U.S.C. § 103(a) as allegedly being obvious over Long should be withdrawn.

**2. Secondary Considerations are Presented as Evidence Over the Examiner's Claim of Obviousness.**

Although applicant maintains that a *prima facie* case of obviousness has not been made in the present application, applicant also provides "secondary considerations" herein as objective evidence of the non-obviousness of applicant's claimed invention. See MPEP § 2141. In particular, applicant submits objective evidence of a long felt need for the invention in the art as evidence of the non-obviousness of applicant's invention. "Objective evidence or secondary considerations such as ... long felt need ... are relevant to the issue of obviousness and must be considered in every case in which they are present." MPEP § 2141. "The length of time the art, though needing the invention, went without it" is an excellent guidepost for inferring non-obviousness. *Safety Car Heating & Lighting Co. v. General Elec. Co.*, 155 F.2d 937, 939, (2d Cir. 1946).

As explained on pp. 1-3 of Applicant's specification, it is desirable to provide a pipetting device and molded tip design that minimizes the force necessary to attach and shuck disposable

pipette tips to and from the mandrel. To accomplish this, many prior art pipetting devices have involved the use of molded plastic pipette tips that included bands/seals extending inwardly from an interior wall of the pipette tip. These bands/seals act to minimize the insertion/removal forces required when joining or removing a disposable pipette tip from the mandrel. However, when such bands/seals are formed on the interior wall of the pipette tip, damage is often caused to the tip during manufacture. As recited on pp. 2-3 of Applicant's specification,

"Because the seals are on the interior wall of the pipette tip and extend inwardly toward the center axis of the pipette tip, the core pin must contact and pull upon the seals before it can be removed from the pipette tip during molding. This contact can damage the seals thus reducing the percentage of pipette tips that pass quality control testing and thereby resulting in increased manufacturing cost for the pipette tips."

Applicant's specification discloses a pipette system that does not utilize raised bands/seals upon the on the interior cylindrical wall of the disposable pipette tip that are pre-disposed to failure. Instead, Applicant's specification discloses a unique mandrel having stepped cylinder with a raised band on each portion of the mandrel cylinder. The raised bands/seals on the mandrel are rigid and are not likely to be damaged during the manufacturing process or during proper use of the pipette device. Furthermore, this allows the mandrel to be used in association with a disposable pipette tip that does not include any raised bands/seals on the interior cylindrical wall of the pipette tip.

Automatic pipette tip insertion and removal systems with sealing bands on the interior of the pipette tip have been around for many years. This is evidenced by the very art cited against the Applicant's claims, which dates from 10 to 25 years earlier. However, none of the prior art provides the solution offered by the novel arrangement of applicant's invention. If Applicant's

claimed invention were obvious in view of the above stated references, a pipette manufacturer, in the last 10 years, would have been driven by the prospect of lowered manufacturing costs and increased pipette performance into creating a pipette tip and mandrel combination similar to the Applicant's claimed invention. However, no such combination exists in the marketplace. The Applicant respectfully submits that the claimed invention addresses a long felt need in the art, not solved by any of the above references, alone or in combination. Accordingly, the Examiner's rejection of claims 1, 7 and 16 under 35 U.S.C. § 103(a) as allegedly being obvious over either Long, Franke, or Williams in view of Long should be withdrawn.

**C. The Rejection of claims 2-6, 8-15 and 17-18 Should Be Withdrawn**

Each of the Applicant's claims 2-6, 8-15, and 17-18 depend from and incorporate all of the limitations of independent claims 1, 7 or 16. The Applicant respectfully submits that the arguments above show that independent claims 1, 7 and 16 are not anticipated or made obvious by the references cited by the Examiner. As a dependent claim includes all of the limitations of the claim from which it depends, the Applicant respectfully submits that claims 2-6, 8-15 and 17-18 are therefore also not anticipated or made obvious by the references cited by the Examiner. Accordingly, the Applicant respectfully requests that the Examiner's rejection of Claims 2-6, 8-15 and 17-18 under 35 U.S.C. § 102(b) and 35 U.S.C. § 103(a) also be withdrawn.

**III. Co-pending Patent Cooperation Treaty Application.**

The Applicant respectfully reminds the Examiner that a co-pending Patent Cooperation Treaty application has been filed for this invention. The Serial number for the application is

PCT/US01/49848. An International Preliminary Examination Report ("IPER"), a copy of which was enclosed with Applicant's previous Response to Office Action dated July 31, 2003. In that IPER, both the Long and Williams references are considered, and all of the claims of the PCT application are found to be "considered as novel and inventive." See IPER for PCT/US01/49848, enclosed with Applicant's Response to Office Action submitted July 31, 2003.

#### IV. CONCLUSION

For all the foregoing reasons, it is respectfully submitted that the Applicant has made a patentable contribution to the art and that this response places the above identified application in condition for allowance. Favorable reconsideration and allowance of this application is respectfully requested. Should the Examiner continue to find any of the claims objectionable for any reason, the Examiner is respectfully requested to contact the undersigned for a telephone interview before taking further action.



Commissioner for Patents  
October 31, 2003  
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In the event the Applicant has inadvertently overlooked the need for an extension of time or payment of an additional fee, the Applicant conditionally petitions therefor, and authorizes any fee deficiency to be charged to deposit account 09-0007.

Sincerely,

ICE MILLER



Russell E. Fowler, II  
Attorney Registration No. 43,615  
ICE MILLER  
One American Square, Box 82001  
Indianapolis, Indiana 46282-0002  
Telephone: (317) 236-5804  
Facsimile: (317) 592-4652

Date: 10-31-03

REF/pgf

Enclosures: Return Postcard

cc: Mr. D. David Hill  
Mr. David W. Bell